

HOMAGE TO WILLIS LINN JEPSON

LINCOLN CONSTANCE

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Willis Linn Jepson was, I believe, the first California-born botanist. Certainly he was the first one of consequence. His parents, William L. and Martha Ann Jepson, left Missouri on the Overland Trail in 1857 as part of a train of three ox-drawn wagons, crossed the plains and mountains without serious incident, and settled on a farm in Vacaville Township, Solano County, California. There six children were born; Willis Linn, the first of two boys, was born in 1867. He always referred to his childhood home in the rolling hills on the edge of the Great Valley as a virtual Eden. Thus he wrote in 1912: "In early days these plains and valleys were in the springtime a wonderful natural garden, literally with a hundred flowers to the square foot, the whole in riotous abundance and running out across the low hills in streamers of yellow and blue . . . It was a rich inheritance for a child to have been born in such a wild garden and to grow into a lad with the flowers rioting each springtime over his head, making for him a hundred ways and a thousand tempting fairy places, all aglow with color, all distinctive with delicate structures, all alive with curious interest." And again, 33 years later, a year before his death: "The blue oaks, every one, on every slope glow radiantly in their new foliage—almost a touch of gold in the swelling crowns. Along the slopes there is now an exhalation of light, of cheer, of animation—as if all the groves joined in a happy and lightsome dance: The winter is past! The winter is past! In the hollows and at the heads of cañons the colonies of Buckeye in their intensest green set off by contrast the gayety of the hills, while a few great trees of the Valley Oak, sequestered on the ridges, stretch dark limbs to the sky, their dignity as yet undisturbed by the warm zephyrs which unlocked the gaunt arms of their cousins. But what a scene now lies in the sparkling sunlight! In that little range of hills all is primitive . . . So, on such green slopes, on such an unspoiled woodland, new born in the spring sunlight, let elves and goblins play! This light and airy immanence of the hills, the blue oaks in the freshness of new leaf, lasts only a week, but in that one week are stirred the gayest and happiest moods of nature's self in the Araquipas. And then it is all gone and one must wait a whole year for its recurrence."

In such a setting and with strong maternal encouragement, it is not surprising that he developed an almost religious life-long devotion to natural history. A career-determining incident in "the early eighties" may have been a trip he made alone to the California Academy of Sciences in San Francisco, where he was befriended by Edward Lee Greene and also had the pleasure of meeting the aging Albert Kellogg, one of the Academy's founders.

Greene was the first strictly botanical appointee to the University of California. His designation as Instructor in 1890 in the new College of Natural Sciences marked the official founding of a Department of Botany. He was at the same time Rector of St. Mark's Episcopal Church; apparently no conflict between religion and science was perceived. Jepson wrote to Joseph Grinnell many years later: "I was appointed Assistant in the Department of Botany the day of its foundation in 1890. The Department consisted of a large room in South Hall, a low partition partially shutting off a sanctum for the Professor of Botany. In one room was everything: laboratory; lectures; the herbarium; mounting for the herbarium; drying of plants; office of the botanical garden; botanical museum; library room, and so on." He became one of a group that included Marshall Avery Howe, Ivar Tidestrom, and Joseph Burtt-Davy. This seems to have been a congenial club who admired their professor, maintained strong ties, and corresponded actively for many years.

As has repeatedly been stated, Greene was a controversial figure. Jepson described his personality as "many sided, highly interesting, in many ways remarkable, and often singularly puzzling . . . it may well be that a just appraisal of his work must wait on the years." He admired Greene's independence and his classical scholarship; some of the older man's interest in botanical history rubbed off on his students. But Jepson sharply diverged from Greene's Special Creationism and his rejection of Darwinian evolution. I have found no correspondence between the two after the publication of Jepson's doctoral thesis, "A Flora of Western Middle California" in 1901. Kate Brandeggee chimed in with the observation (referring to Greene): "I think he's not sane. Did he ever tell you that his father spent the last dozen years of his life in an insane asylum and died there? His affliction took the form which the French call 'the insanity of grandeur.' "

In co-founding the journal *ERYTHEA* with his star pupil, Greene afforded Jepson an important platform to make himself widely known and respected throughout the botanical community. B. L. Robinson of Harvard wrote the new editor: "I am also very glad to hear of your plan of working over Prof. Greene's species. You can scarcely do a better piece of work for American systematic botany than to make a critical and dispassionate study of his species . . . I do not think your task will be an easy one but it will not be thankless either.



A. As a boy.



B. 1896.



E. 1928, in his office at UC Berkeley.



C. 1897, Ukiah, California.



D. 1911, in the Sierra Nevada.

FIG. 1. Willis Linn Jepson. Photos courtesy of the Jepson Herbarium.

There will be a number of us who will sincerely appreciate your efforts in the cause of accurate science."

When Greene left Berkeley in 1895 to accept a position at the Catholic University of America, the event was heralded by The San Francisco Call as "Berkeley's Great Loss." There was much discussion as to whether and how Greene should be replaced, or whether Dean Hilgard should be allowed to absorb Botany into the College of Agriculture, with or without a new appointment. Hilgard's candidate was Charles E. Bessey, whose New Botany was attracting considerable attention at the time. Just in case Hilgard succeeded, Jepson applied to the Oregon Agricultural College in Corvallis, albeit unsuccessfully. Some observers thought it would be logical that Jepson should succeed Greene since "he is the most promising young botanist in the country and the most effective worker on the Pacific Coast." But Jepson was not to receive the doctorate (the first one given in Botany in the University) for another three years, and the regents had insufficient funds to attract Bessey. So, they compromised: William A. Setchell, with Yale and Harvard degrees and expertise in algae and fungi—part of Bessey's New Botany, was awarded the position. So technically, Jepson received his Ph.D. under Setchell, who was only three years his senior. Factually, he was largely self-educated with important input from Greene and some additional burnishing acquired through half-years spent at Cornell and Harvard, respectively. Just why the early warm friendship between Setchell and Jepson turned into active rivalry and eventually froze into animosity will doubtless continue to be a subject of speculation. The marked differences between these two strongly independent personalities were probably sufficient to bring about that result. At all events, it was a matter of real concern to graduate students of the twenties and thirties. Jepson worked his way slowly but steadily through the academic maze for the next 46 years, culminating in emeritus status in 1937. Like Greene before him, he complained bitterly that academic advancement was slow in coming, doubtless a factor in his progressive disillusionment with university administration in general.

In 1900, he discontinued publication of *ERYTHEA* to the expressed regret of many subscribers (including Bessey), to concentrate on his floristic investigations. His ultimate goal, conceived even before he entered Berkeley, was to produce a flora of California that would treat all the vascular plants of the state at an almost monographic level. The project was based on the assumption that one individual could hope to know a flora of several thousand taxa in that degree of detail. The first fascicle appeared in 1909, the last in 1943, but its completion was thwarted by age and undefined illness, the latter having haunted him all his life. Along the way he found time to expand his thesis/flora into the much admired "Manual of

the Flowering Plants of California," certainly his most widely used and influential book. There also were remunerative high school texts. He created the California Botanical Society and founded and for many years edited its journal, MADROÑO. His "Silva of California" is a handsome coffee-table example of its author's dedication to forestry and forest conservation. The University presented a specially bound copy to President Theodore Roosevelt when he visited the Berkeley campus on Charter Day in 1911. Among the students he trained or strongly influenced were: Harvey M. Hall, Helen M. Gilkey, Alice M. Ottley, David D. Keck, John Thomas Howell, Herbert L. Mason, Lauramay Dempster, J. Edison Adams, Mary L. Bowerman, Joseph Ewan, Robert F. Hoover, and myself. I came to know him only in his mid-sixties, when he was past his physical prime, but perhaps at the height of his mental powers. He was so engrossed in his Flora by that time that he had erected a protective secretarial screen to protect himself from unnecessary human contact, but he could be warm and hospitable if one could get beyond the barrier. But the passage was not easy and the outcome was unpredictable. He no longer made a pretense of lecturing to his classes—they were turned over to his associate, Herbert Mason, but he still did conduct a weekly seminar, and he could be an effective teacher on an individual basis.

Jepson was elected Faculty Research Lecturer for 1934, the highest honor the Faculty Academic Senate can bestow upon one of its members. His subject was "The content and origin of the Californian flora: A demonstration of scientific methods." I attended it and remember that it dealt successfully with problems of natural variation influenced by environmental factors drawn from the California poppy and other "difficult" groups. He enjoyed the adulation he received, and his students were suitably impressed. In June of the same year, Setchell retired and stepped down as departmental chairman after 39 years.

The university administration decided that this would be a propitious opportunity to re-examine this small and distinguished, if sometimes raucous department. The conclusion was reached that Plant Science on the Berkeley campus would be best served by augmenting the botany staff with faculty members drawn from several areas of the College of Agriculture. The plan was implemented by appointing a new chairman from the Division of Plant Nutrition. Jepson found this procedure doubly intolerable—to pass over the departmental faculty, of whom he was clearly the senior member, and to infuse the department with faculty from the College of Agriculture! Although he came to like, or at least tolerate, some among the Agriculture personnel—particularly Alva R. Davis, he regarded this action as the ultimate treachery. The administration, on the

other hand, did not dare offer him the chairmanship, even if it had been disposed to do so, for fear he would accept the invitation.

The California Botanical Society celebrated its silver jubilee (25th anniversary) on 23 April 1938. Jepson gave the principal address, a retrospective of the society and much else. This was published in volume 4 of *MADRONO*, which was appropriately dedicated to the founder. In 1941, Jepson was awarded an LL.D. Pictures show him at the ceremony, tall and erect and clad in this cap and gown, in the Greek Theater, in rituals presided over by President Robert Gordon Sproul and by Charles B. Lipman, Dean of the Graduate Division, his arch enemy. The last installment Jepson contributed to the Flora of California, terminating in the genus *Solanum*, with the formidable prospect of Scrophulariaceae confronting the author, was issued in 1943. His final years were dogged by ill health and especially bitter frustration at knowing that there was no way he could ever complete the great Flora.

The whole thrust of Jepson's research and teaching was the unified objective of reaching a better understanding of the plant world of California and transmitting that knowledge by both written and spoken word to as wide and diverse an audience as possible. A strong sense of the dramatic and a carefully cultivated lyric expression were important instruments in this process. The "field,"—the environment—was almost as important as the flora itself. He never became much interested in the niceties of nomenclature, although he made a point of attending all international botanical congresses and participating in their nomenclatural sessions. He elected to follow a relatively conservative pattern, in contrast to Greene's extreme practices. His taxonomic emphasis was on careful observation and description of plants as they grow in nature, and on meticulous documentation. In a fit of desperation occasioned by discovery of serious insect damage in his herbarium, he commented: "The herbarium will be my monument, more than the flora. Eventually the flora will be, in a way, out of date. The herbarium never will be—botanists will always wish to go back to it." The encouragement of amateurs was an important part of his overall program. He attracted them by lectures and popular articles, and his usually careful attention to requests for identifications and information. He had willing contributors in every corner of the state, several of them of expert status.

He was not afraid of innovation, but he did look at vaunted taxonomic improvements with a critical eye. He knew about cytogenetics and chromosome number, which came into vogue in his later years, but probably wisely concluded to stay with familiar techniques. I don't think he would have been abashed by electronic methods and information based on DNA, although he might have regarded them as the telomes and flavonoids of this era. Critical

observation, careful documentation, and lucid expression were the essence of his teaching.

In my opinion, Jepson laid a solid foundation for the continued and expanded investigation of the California flora, by whatever means, well into the 21st century. For this, we honor him tonight.

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